

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SAN DIEGO REGION

2375 Northside Drive, Suite 100, San Diego, CA 92108
(619) 516-1990 • Fax (619) 516-1994
<http://www.waterboards.ca.gov/sandiego>

**REVISED (Version 11/25/2014) TENTATIVE ORDER NO. R9-2014-0109
AMENDING**

**ORDER NO. R9-2010-0012, NPDES NO. CA0108952,
WASTE DISCHARGE REQUIREMENTS
FOR THE SWEETWATER AUTHORITY
RICHARD A. REYNOLDS DESALINATION FACILITY
DISCHARGE TO THE LOWER SWEETWATER RIVER BASIN
SAN DIEGO COUNTY**

Changes to the Tentative Order listed below are shown in **red bold and underline/strikeout** format to indicate added and removed language, respectively.

The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board), finds that:

1. On May 12, 2010, the San Diego Water Board adopted Order No. R9-2010-0012, National Pollutant Discharge Elimination System (NPDES) No. CA0108952, (Order) establishing waste discharge requirements for Sweetwater Authority (Discharger) to discharge up to 1.0 million gallons per day (MGD) of demineralization brine and miscellaneous groundwater discharges from the Richard A. Reynolds Desalination Facility (Facility) to the Sweetwater River.
2. Order No. R9-2010-0012 provides that following relocation of the discharge from Discharge Point 001a to Discharge Point 001b, the Discharger may increase the discharge flow rate from 1.0 MGD to 2.5 MGD. Order No. R9-2010-0012 specifies the location of Discharge Point 001b as 32°39'19.98" N, 117°05'26.225" W.
3. By letter dated April 1, 2014, the Discharger notified the San Diego Water Board that as of March 28, 2014, the construction of Discharge Location 001b is complete, that the coordinates of Discharge Point 001b differ slightly from the coordinates specified in Order No. R9-2010-0012, that the discharge from Discharge Point 001a has ceased (except for emergency discharges), and that the discharge from Discharge Point 001b has commenced.
4. The Discharger is currently discharging at a flow rate of 1.0 MGD. However, the Discharger is in the process of upgrading the Facility and plans to begin discharging at the increased flow rate of 2.5 MGD on or about September 2016.
5. On March 16, 2012 and on July 31, 2014, the Discharger submitted a Report of Waste Discharge requesting that requirements in Order No. R9-2010-0012 be modified to do the following:
 - a) Update the contact information for the Facility;

- b) Reflect the completion of construction of Discharge Point 001b and correct the coordinates for the discharge point;
 - c) Allow the increase in flow from 1.0 MGD to 2.5 MGD, consistent with section III.H of Order No. R9-2010-0012;
 - d) Discontinue monitoring for chemicals that do not have a reasonable potential to cause or contribute to an exceedance of a water quality standard;
 - e) Revise the salinity effluent limitation for Discharge Points 001a and 001b from 8-11 parts per thousand (ppt) to 7-11 ppt;
 - f) Reduce the monitoring frequency to quarterly for chemicals in the discharge brine;
 - g) Cease the quarterly benthic invertebrate and macroalgae monitoring;
 - h) Use annual high resolution aerial photography to map estuary vegetation and to track and analyze macroscale habitat changes;
 - i) Continue annual quantitative vegetation monitoring to validate aerial imagery, noting that quantitative monitoring may be discontinued after five years of expanded discharge (i.e. 2.5 MGD) if no negative effects were identified or decreased in frequency to once every three years; and,
 - j) Establish permanent photo stations along the river channel and collect monthly images to document vegetation and physical changes within the river over time.
6. This Order amends Order No. R9-2010-0012 to update the contact information for the Facility.
7. This Order amends Order No. R9-2010-0012 to reflect the completion of construction and to correct the coordinates for Discharge Point 001b. This Order also amends Order No. R9-2010-0012 to require that brine discharges from Discharge Point 001a be ceased except for emergencies or maintenance of Discharge Point 001b. The effluent limitations for salinity at Discharge Points 001a and 001b, have been revised based on new information provided by the Discharger, as discussed in Finding 11.a below. This Order amends the monitoring and reporting requirements, based on the change in discharge location.
8. This Order amends Order No. R9-2010-0012 to increase in flow from 1.0 MGD to 2.5 MGD, consistent with section III.H of Order No. R9-2010-0012.
9. The other changes requested by the Discharger are not being considered at this time, but may be considered during the next permit reissuance.
10. An NPDES permit for the Discharger must conform with federal and state antidegradation policies provided in the Code of Federal Regulations, title 40 (40 CFR) section 131.12 and in State Water Board Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California*. The antidegradation policies require that beneficial

uses and the water quality necessary to maintain those beneficial uses in the receiving waters of the discharge shall be maintained and protected, and, if existing water quality is better than the quality required to maintain beneficial uses, the existing water quality shall be maintained and protected unless allowing a lowering of water quality is necessary to accommodate important economic and social development or consistent with maximum benefit to the people of California. When a significant lowering of water quality is allowed by the San Diego Water Board, an antidegradation analysis is required in accordance with the State Water Board's Administrative Procedures Update (July 2, 1990), *Antidegradation Policy Implementation for NPDES Permitting*. The changes in this amendment are not expected to further degrade the receiving water.

11. Sections 402(o)(2) and 303(d)(4) of the Clean Water Act (CWA) and federal regulations at 40 CFR section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. This Order is consistent with the anti-backsliding provisions for the following reason:
 - a. 40 CFR section 122.44(l)(i)(B)(1) allows less stringent effluent limitations when information is available which was not available at the time of permit issuance and which would have justified the application of a less stringent effluent limitation at the time of permit issuance.

By letter dated March 16, 2012, and as clarified during subsequent discussions with the Discharger, the salinity of the influent to the Facility is lowered during wet weather events. This results in a decrease in the salinity of the effluent from the Facility unless the Discharger changes operations at the Facility to control salinity. Doing so may negatively affect the Facility's ability to comply with other water quality objectives. Based on findings of the Merkel & Associates reports dated March 13, 2012 and July 30, 2014, and also based on findings of the *Reynolds' Demineralization Facility Expansion Project – Brine Discharge Mixing Analysis, Final Report (November 2008)*, a modification of the salinity effluent limitation from 8-11 parts per thousand (ppt) to 7-11 ppt will not adversely impact receiving water quality objectives. This information is information which was not available at the time of permit issuance and which would have justified the application of a less stringent effluent limitation at the adoption of Order No. R9-2010-0012.

12. Section 13263(e) of the California Water Code, provides that the Regional Water Board may, upon application by any affected person, or on its own motion, review and revise waste discharge requirements. 40 CFR section 122.62(a)(2) authorizes the reopening and modification of an NPDES permit based upon new information.
13. Order No. R9-2010-0012 is not being reopened for any other purpose than the revisions contained herein. Except as contradicted or superseded by the findings and directives set forth in this Order, all of the previous findings and directives of Order No. R9-2010-0012 shall remain in full force and effect.
14. This action is exempt from the requirement of preparation of environmental documents under the California Environmental Quality Act (Public Resources Code, division 13, chapter 3, section 21000 et seq.) in accordance with section 13389 of the California Water Code.

15. The San Diego Water Board has notified all known interested parties of its intent to adopt this Order.
16. The San Diego Water Board in a public meeting on December 11, 2014, heard and considered all comments pertaining to the adoption of this Order.
17. Any person aggrieved by this action of the San Diego Water Board may petition the State Water Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 et seq. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

IT IS HEREBY ORDERED:

1. This Order amends Order No. R9-2012-0012, NPDES No. CA0108952, as described in the revised version included as Attachment 1 to this Order. Added text to Order No. R9-2012-0012 is displayed in red underline text and deleted text is displayed as ~~red-strikeout~~ text. Modifications to Order No. R9-2012-0012 were made to the following sections:

<u>Page No.</u>	<u>Section No.</u>
1	Title page
2	Table 2 and 3
<u>3</u>	<u>Signature Block</u>
6	I, Table 4
7	II.A, B
<u>8</u>	<u>II.B</u>
<u>15</u>	<u>III.H</u>
<u>17</u>	<u>Table 6a</u>
<u>18</u>	<u>Table 6b</u>
19	IV.A.3.a
41	VI.C.6
<u>E-4</u>	<u>Att. E, Table E-1</u>
E-5	Att. E, Table E-1

<u>Page No.</u>	<u>Section No.</u>
<u>E-6</u>	<u>Att. E, Table E-2</u>
<u>E-20</u>	<u>Att. E, Table E-7</u>
E-25	Att. E, X.B.7.c
F-4	Att. F, I
F-6	Att. F, II.A.1
<u>F-8</u>	<u>Att. F, II.B</u>
F-9	Att. F, II.B, Table F-4
<u>F-13</u>	<u>Att. F, II.E</u>
<u>F-18</u>	<u>Att. F, IV.A</u>
F-41	Att. F, IV.C.3, Table F-15d
F-60	Att. F, VI.G.2.a
F-63	Att. F, VI.G.6
F-66	Att. F, VII.G

2. The amended version of Order No. R9-2012-0012 included as Attachment 1 to this Order shall become effective on December 11, 2014.
3. San Diego Water Board staff is directed to prepare and post a conformed copy of Order No. R9-2012-0012 incorporating the revisions made by this Order.

I, David W. Gibson, Executive Officer, do hereby certify that this Order is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on **December 11, 2014**.

 Tentative Order
 David W. Gibson
 Executive Officer